

INDEX-BASED SCOREBOARDING SYSTEM AND METHOD

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ABSTRACT

A computer system includes a scoreboard mechanism that provides a locking scheme to preserve data dependencies. An index is used to unlock (i.e., invalidate) scoreboard entries when a terminating event associated with that entry's instruction has occurred. For a load instruction, the terminating event that triggers invalidation for a particular scoreboard entry is the return of the load data. An index is used to identify the scoreboard entry associated with the returning load instruction, since load instructions may return load data out of order.

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